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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,696	10/27/2006	Guido Cappellotto	C&P-146US	6770
23122	7590	03/11/2009		
RATNERPRESTIA			EXAMINER	
P.O. BOX 980			BELLINGER, JASON R	
VALLEY FORGE, PA 19482				
		ART UNIT	PAPER NUMBER	
		3617		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/538,696

**Applicant(s)**

CAPPELLOTTO ET AL.

**Examiner**

Jason R. Bellinger

**Art Unit**

3617

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 6-8 and 16-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-15 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on applications filed in Italy and the European Patent Office on various dates. It is noted, however, that applicant has not filed a certified copy of any of the foreign applications as required by 35 U.S.C. 119(b).

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 is indefinite due to the fact that it is unclear what is actually being claimed by the phrases "is formed responsive to" and "tapping into the axial hole". Furthermore, it appears that these limitations may be method limitations set forth in an apparatus claim. As such, these limitations would receive no patentable weight. See MPEP 2113.

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-2, 4, 9-14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilske. Wilske shows a spoke having all of the structure as set forth in the above claims, except for the following:

Wilske does not disclose the type of material from which the shaft (F) is made. However, it is well known in the art to form spokes from lightweight materials in order to reduce the weight of a wheel assembly. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the shaft of the spokes of Wilske from a light alloy in order to reduce the weight of the spoke without sacrificing strength and durability.

Wilske does not show the spoke shaft (F) including a terminal element (f) located at the end which connects to a spoke nipple (d). However, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the threaded terminal element (f) of Wilske at both ends of the spoke shaft (F), as a duplication of parts in order to allow the spoke shaft to be connected to a wheel rim and hub in any manner (i.e. making the spoke shaft omni-directional), which would reduce assembly time, and manufacturing costs.

Wilske does not disclose the length of the chamber in the terminal element (f) such that the entire threaded bore is not in contact with the threaded end of the connecting element (G). However, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the threaded bore of the terminal element of Wilske with such a length that the threaded end (g) of the connecting element (G) does

not completely engage the entirety of the threaded bore in order to allow adjustment of the tension of the spoke.

Wilske also does not show the shaft having a constant external diameter. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the spoke shaft of Wilske with a constant exterior diameter, for the purpose of reducing the number of manufacturing steps performed on the spoke shaft, thus reducing manufacturing costs and time.

6. Claims 3, 5, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilske as applied to claims 1-2, 4, and 9-14 above, and further in view of Imao et al. Wilske does not specify that the shaft is made from a material having a mechanical strength less than that of the terminal element. Imao et al teaches the use of a spoke having terminal elements (1-2) formed from steel, while the shaft 3 is formed from a fiber reinforced material. This material would have a mechanical strength less than that of the steel.

Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the terminal end(s) of Wilske from steel while the shaft is formed from a less mechanically strong material, for the purpose of reducing the weight of the spoke (and thus the entire wheel assembly).

***Response to Arguments***

7. Applicant's arguments filed 23 December 2008 have been fully considered but they are not persuasive. The Applicant argues that Wilske does not show the shaft having respective internally threaded portions at each end of the shaft. However, it should be noted that this limitation was addressed in the rejection under 35 USC 103 with Wilske in the previous office action. The bulk of that rejection is reproduced in the new 103 rejection above (see paragraph 3 of section 5).

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R. Bellinger whose telephone number is 571-272-6680. The examiner can normally be reached on Mon - Thurs (9:00-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason R Bellinger/  
Primary Examiner  
Art Unit 3617